



Century**Link**™

Limitations of Connect America Fund Phase I Incremental Support Criteria

January 25, 2012

The Goal of CAF Phase I Incremental Support

- “CAF Phase I incremental support is designed to provide an immediate boost to broadband deployment in areas that are unserved by any broadband provider.”
- “To spur immediate buildout, we will provide additional funding ... to extend robust, scalable broadband to hundreds of thousands of unserved Americans”
- “Specifically, carriers must provide broadband with actual [sustained] speeds of at least 4 Mbps downstream and 1 Mbps upstream, ... and with monthly usage capacity reasonably comparable to that of residential terrestrial fixed broadband offerings in urban areas.”

CAF I Notification & Eligibility Requirements

- Within 90 days ... each carrier must ... identify[] the areas by wire center and census block in which [it] intends to deploy broadband.
- The carrier must deploy broadband to one unserved location for every \$775 in incremental support.
- Unserved areas are:
 - ✓ shown on the most current version of the National Broadband Map as unserved by fixed broadband with a minimum speed of 768 kbps downstream and 200 kbps upstream ...
 - ✓ and that, to the best of the carrier's knowledge, are, in fact, unserved by fixed broadband at those speeds.
 - ✓ Fixed broadband is defined to include, among other things, "terrestrial fixed wireless - unlicensed."
- The carrier must also certify that it did not already plan to complete broadband deployment to that area ... and that "support will not be used to satisfy any merger commitment or similar regulatory obligation."

The Eligibility Requirements Threaten the Goal

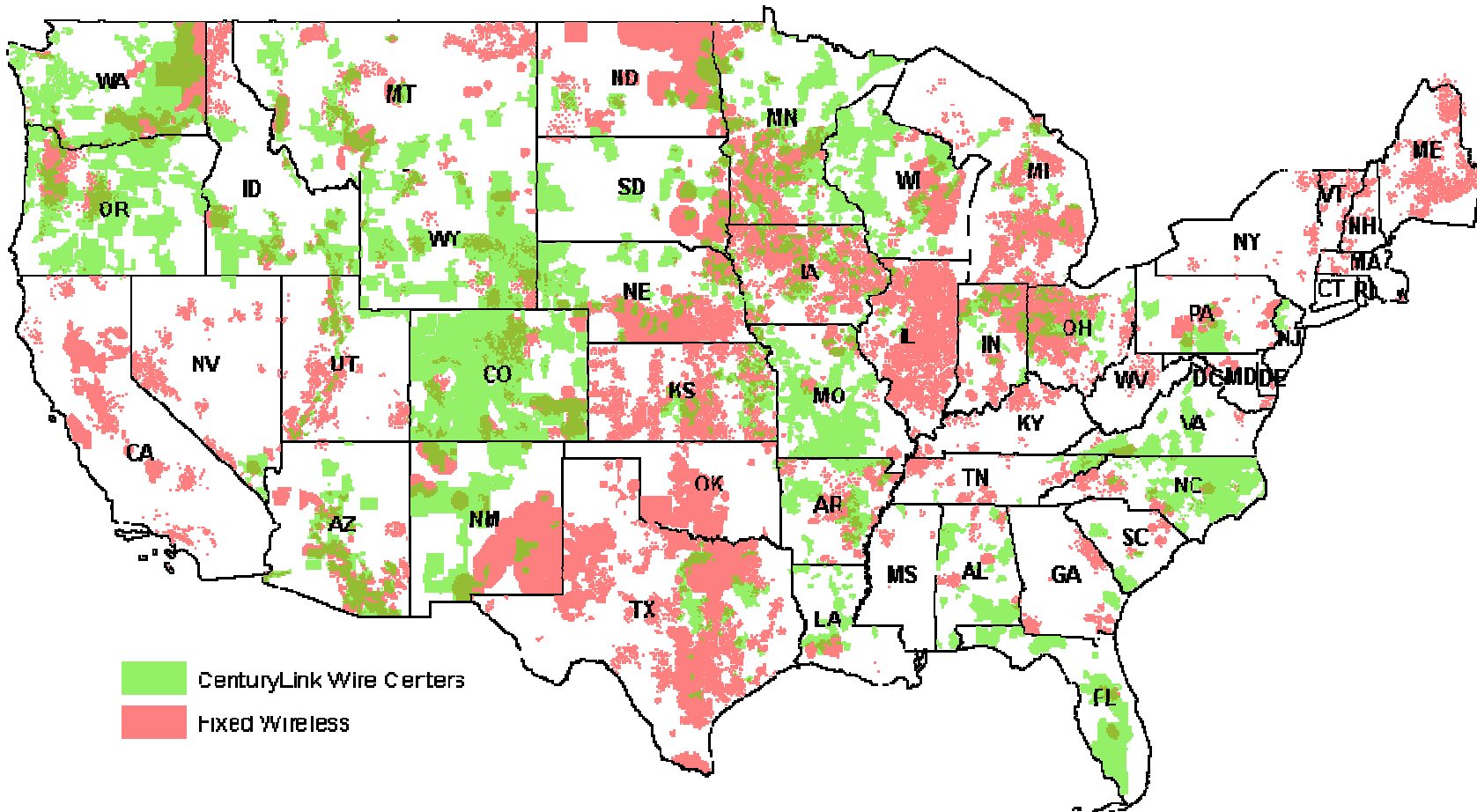
- The National Broadband Map does not accurately reflect many fixed wireless service areas.
- Fixed wireless broadband over unlicensed spectrum excludes many locations despite offering service analogous to satellite broadband.
- Eligible census blocks cannot contain even one served location, yet most unserved locations are in partially-served census blocks.
- The calculation of the \$775 per household requirement does not take into account the locations that will be used to satisfy merger commitments.
- Many customers in otherwise unserved areas outside of potential Phase II CAF areas could be upgraded from 768 kbps to 4 Mbps, but will be left behind instead.

Fixed Wireless – Issues

- When a census block is partially served using unlicensed spectrum, the unserved customers likely will never receive service.
- In many cases fixed wireless coverage is overstated in NBM.
- Unlicensed spectrum offers limited capacity, is often heavily utilized, and cannot offer freedom from interference.
 - ✓ Speed and throughput options appear limited, while pricing can be high when compared with terrestrial broadband networks.
 - ✓ Services appear to be often capped with low maximum total throughput each month.
 - ✓ Providers throttle service to accommodate large file transfers.
- Line of sight issues hinder broadband coverage and speeds.
- Also, susceptible to interference from weather.

Fixed Wireless Overlay

US Dept of Commerce, National Telecommunications and Information Administration, State Broadband Initiative c December 2010 Submission



Notes:

All Fixed Wireless areas self-reported to provide at least 768kbps service

Fixed Wireless Provider Air Pipe's Washington & Idaho footprint

http://www.air-pipe.com/Id_coverage_map.html

http://www.air-pipe.com/lq_coverage_map.html

Fixed Wireless - Line of Sight Limitations



- Home
- Promotions
- Product Info
- VoIP
- Pricing
- Services
- Coverage Area
- Sign up for Service
- Newsletter
- Photos
- Forms
- Support
- Email
- Company Profile

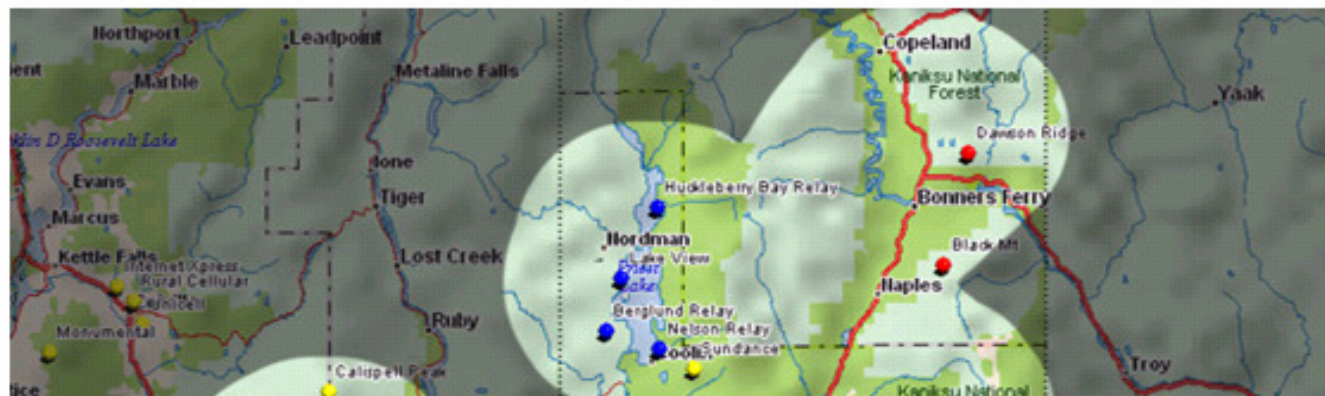
Coverage Area

and always expanding

The Canopy™ system uses a microwave technology that requires a clear line of site from one of our towers to your home or business. The best way to determine if you can connect to the AIR-PIPE network is go to a high point on your property and look in the direction of one of the below towers. If you have any trees or tall buildings obstructing your view we may not be able to provide service to your location.

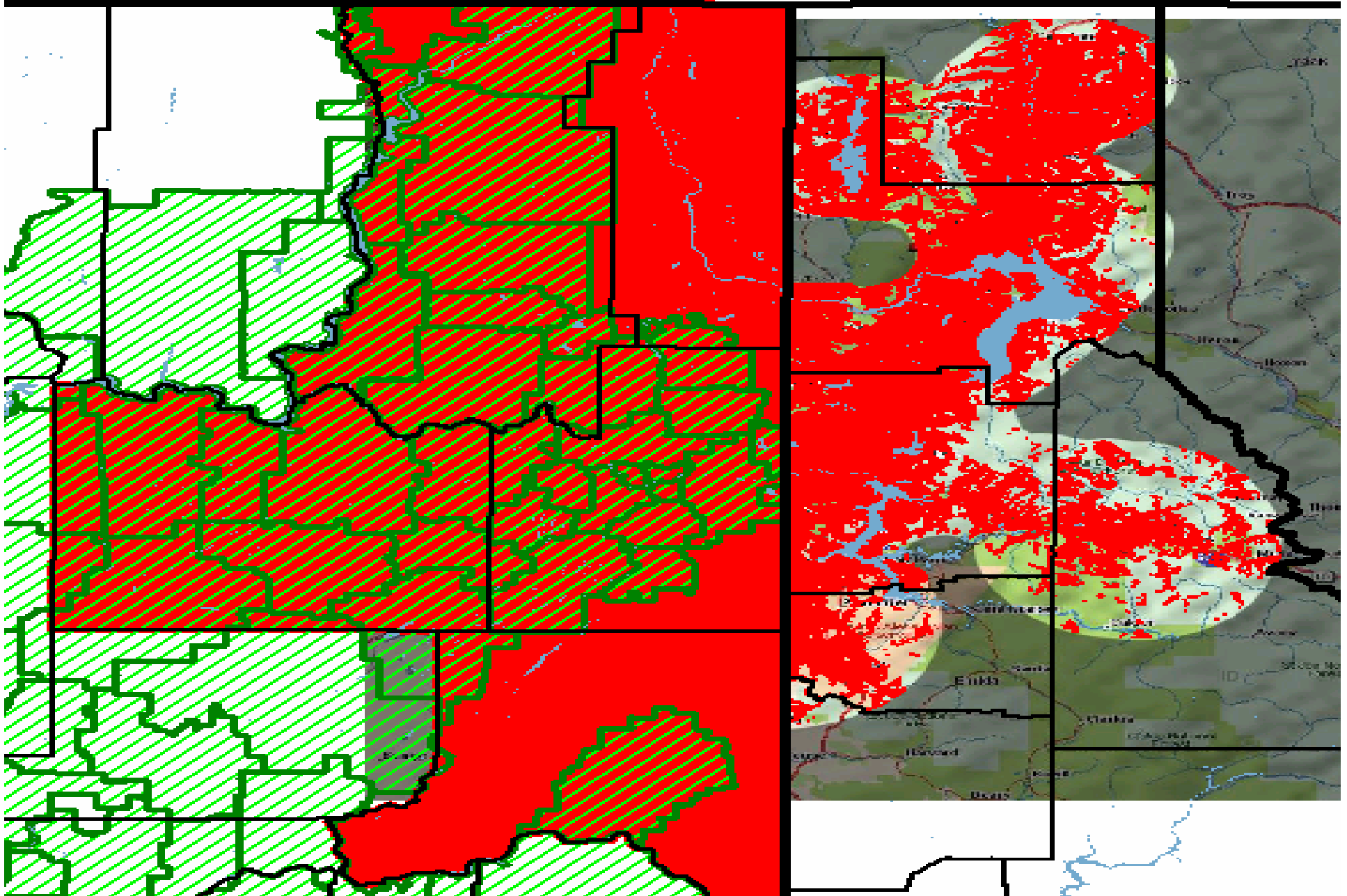
Please call, fill out our [form](#) or send an email with your address and telephone number and we will be happy to check your location in our topographical system and determine whether your location is reachable.

Click on one of the tower locations to see a close up view of the coverage area or view an [enlarged version](#) of the map below.



Air Pipe Coverage Per NTIA Website

Note: Washington map (left) indicates the entire county is served while Idaho map (right) indicates spotty census block coverage



Fixed Wireless Pricing

Photos
Forms
Support
Email
Company Profile
Career Opportunities
Contact Us
ACSP
Sitemap
Privacy Policy

Monthly Package Options

Our subscribers receive average burstable **download speeds of 5mbps** and **upload speeds of 2.8mbps** for normal browsing and surfing on an AIR-PIPE Internet connection which is supported by unbiased statistics received from the World Results at Speedtest.net.

AIR-PIPE believes in being completely up front with our customers and letting them know exactly what they are receiving when subscribing to our service. That's why we offer our packages in relation to the large file transfer speed you choose to compliment your fast burstable browsing and surfing connection.

Please contact [customer service](#) for support in determining which package best accommodate your needs.

	<u>Sustainable Large File Transfer Speed</u>	<u>File Buffer*</u>	<u>Monthly Fee</u>
I	256Kbps Download/256Kbps Upload	2.5 MB	\$ 49.95
II	512Kbps Download /512Kbps Upload	5 MB	\$ 59.95
III	768Kbps Download /768Kbps Upload	7 MB	\$ 69.95
IV	1Mbps Download /1Mbps Upload	10 MB	\$ 79.95
V	1.5Mbps Download /1.0Mbps Upload	15 MB	\$129.95
VI	1.5Mbps Download /1.5Mbps Upload Includes a 70% CIR and 1 Public IP Address	20 MB	\$199.95

**The file buffer represents the capacity in which you are able to transfer files using burstable speeds before your connection is throttled to your sustainable large file transfer speed for the duration of that single file transfer. Once the file has finished transferring your buffer empties and your speeds switch back to your broadband burstable speeds.*

[Click here to access a printable price sheet.](#)

FREE EMAIL With Activation: Five (5) complimentary Email addresses are available with activation of service. Each additional Email address is \$9.50 a month.

Residential Service Plans

BasicLite Service

\$24.95/month* includes:

- 2 GB of internet consumption**
- 1 email address
- 10 day money back guarantee
- Modem activation / installation fees will apply

Basic Service

\$39.95/month* includes:

- 10 GB of internet consumption**
- 5 email addresses
- 10 day money back guarantee
- 10 MB personal web space
- Modem activation / installation fees will apply

Premium Service

\$59.95/month includes:

- 200 GB of internet consumption**
- 10 email addresses
- 10 day money back guarantee
- 25 MB personal web space
- Reduced rate for telephone services
- Waived modem insurance fee
- FREE installation for telephone service (Savings of \$24.95)
- FREE installation / activation for internet (Savings of up to \$24.95)

CommSpeed Internet Consumption Overview

The Internet has seen tremendous growth in total usage over the last year. New applications are being developed everyday and these applications are causing an ever increasing demand for bandwidth. Quite simply, the content of the Internet has evolved. The downloads of digital content; streaming television shows, live sporting events, full length digital motion pictures, music, online gaming, etc...have made a broadband internet connection the primary source of home entertainment. Because speed of delivery and quality of service is important, CommSpeed has invested millions of dollars over the last 12 months, both hardening network for better reliability and adding capacity for better throughput performance.

Here at CommSpeed we understand that measuring your internet consumption is no easy task. CommSpeed will provide the tools to help the subscriber monitor their internet consumption however, it is up to the subscriber to stay within their internet consumption allowance. If the subscriber consumes more than the monthly allotted internet consumption amount, that subscriber will be charged an additional \$2 per gigabyte fee on their next monthly statement. **Any consumption between the hours of midnight and 6:00am will not count against your total internet consumption.**

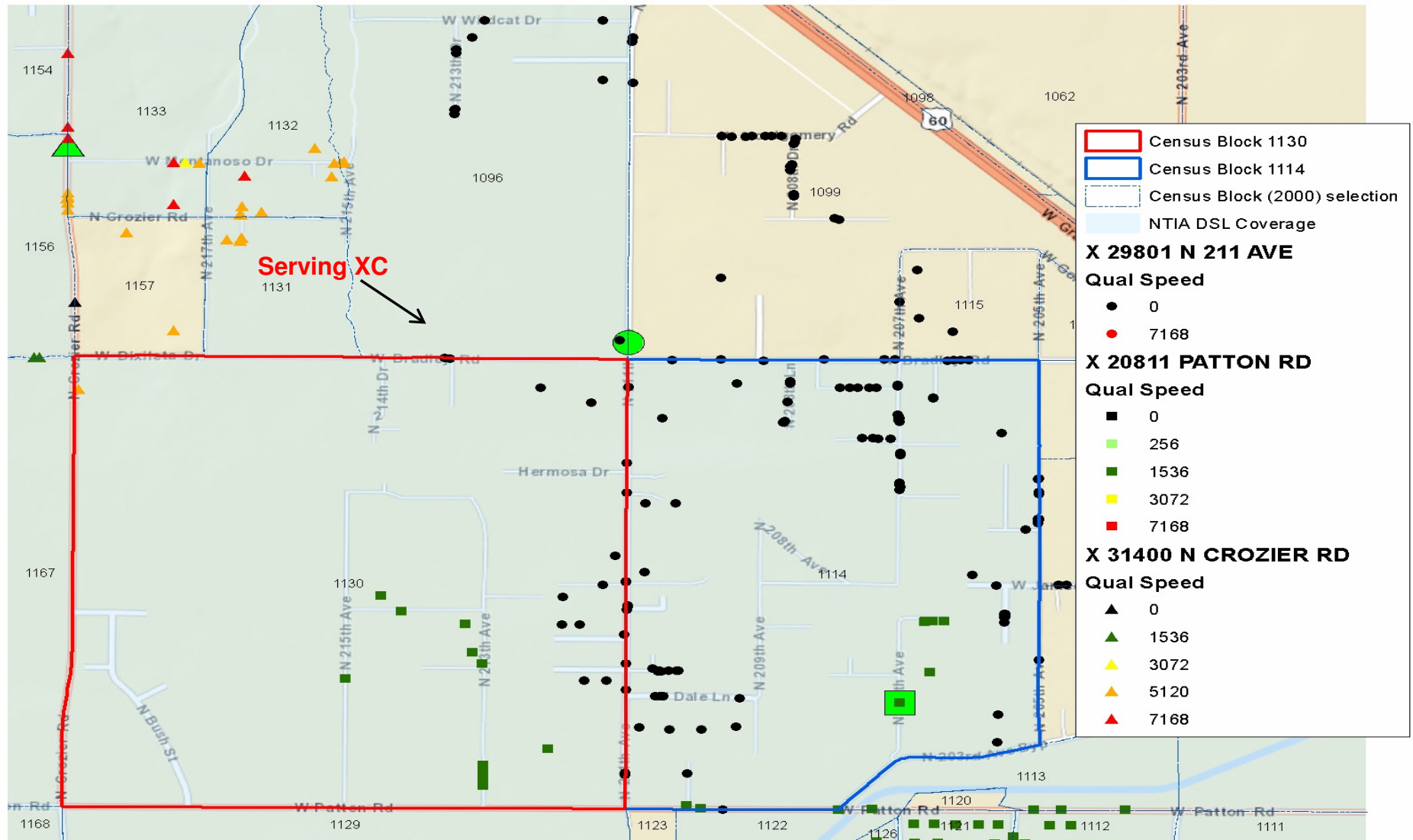
The information provided below is to be used as an example to help CommSpeed subscribers determine which one of our two rate plans will be most effective for their internet experience. The numbers provided below reflect the consumption patterns of an average internet user.

Average user with a 10GB allowance		
	Per Month	Total Bandwidth Consumed
General Internet Browsing	100 hours	500MB
Email Communication (total sent/received)	400 emails	20MB
Internet Phone Service	500 minutes	1.1GB
Music Downloads	100 Tracks	600MB
Movie Streaming	3 movies	6GB
Online Gaming	100 hours	1.5GB
Total Gigabytes Used = 9.9GB		
Actual internet consumption may vary.		

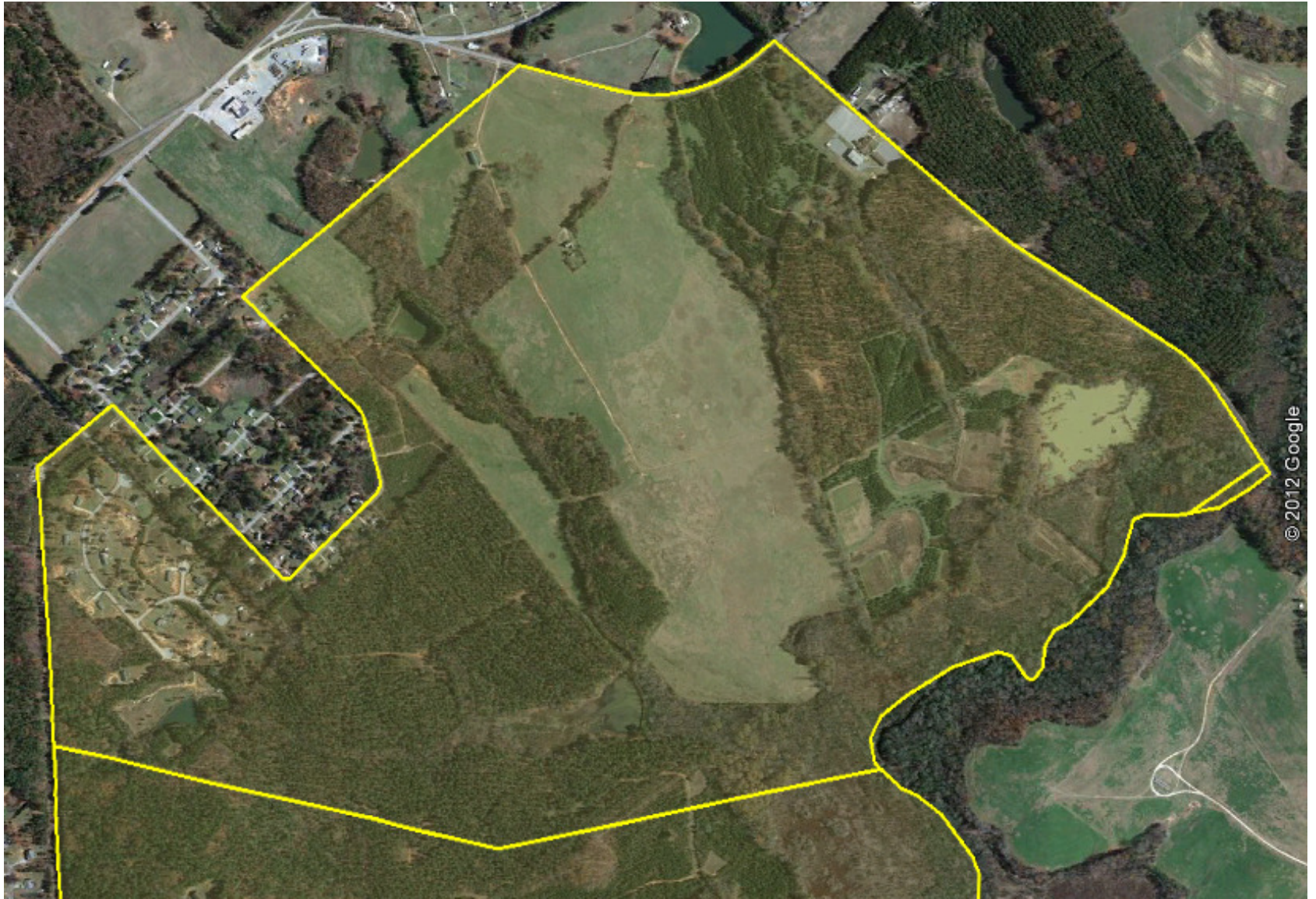
Addressing the Census Block Issue

- According to the NBP Map a census block is defined as “served” if there is one broadband subscriber in the census block.
- Many of the currently unserved locations are in partially-served census blocks.
- Networks aren’t designed with census blocks in mind. Often a few subscribers are reached by the edge of the network in an adjacent census block.
- Customers in the unserved portions of partially-served census blocks in rural high cost areas should be able to receive broadband for the first time.

The “Served” Census Block Dilemma



Near Ninety-Six, SC



Census Block Near Ninety-Six, SC



CenturyLink Terminal BB Speed

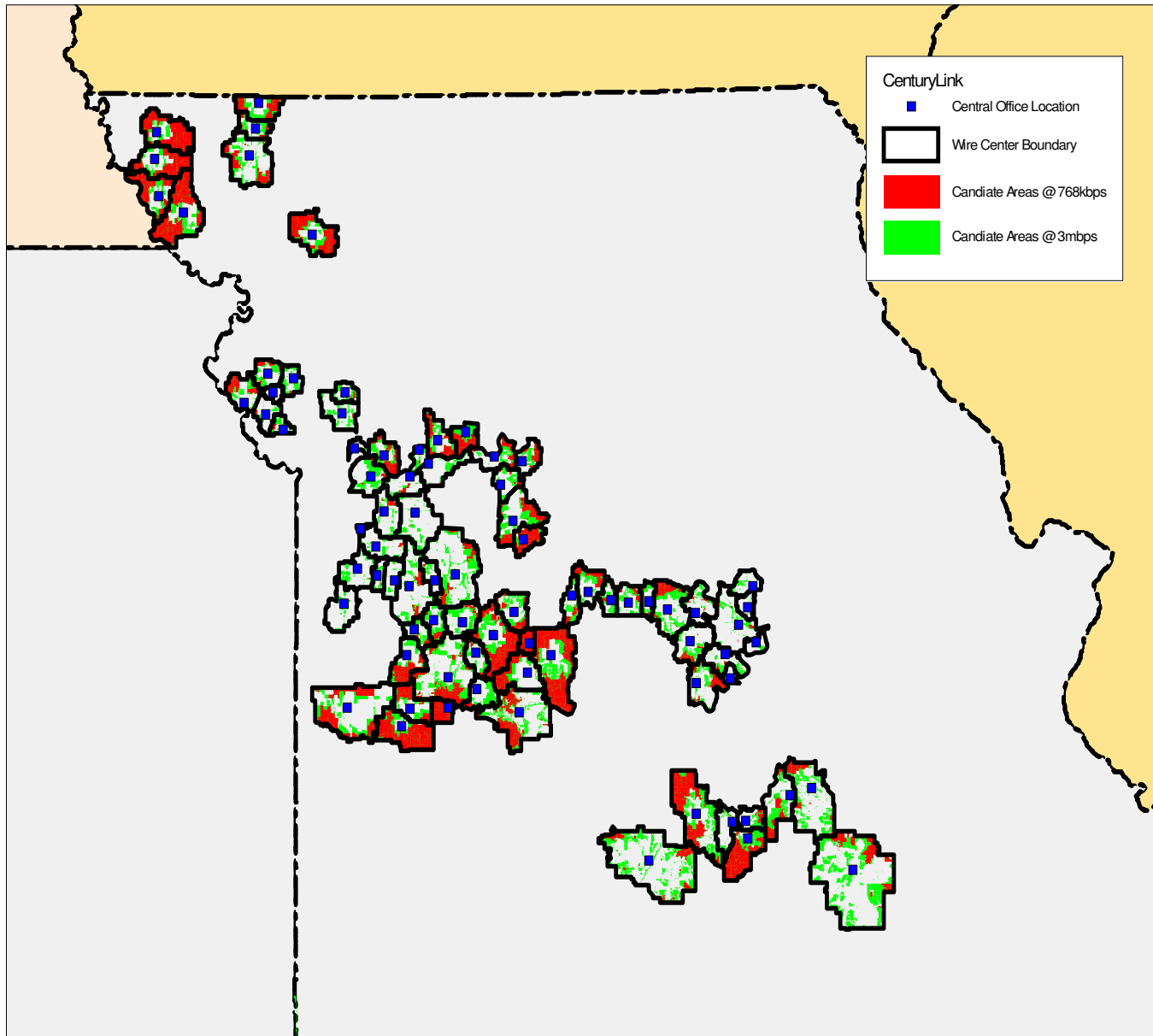
- 0.0 K
- 768 K - 1.5 M
- 3.0 M - 5.0 M
- 10.0 M
- 15.0 M

Max. Speed	Terminals
0.0 K	37
3.0 M - 5.0 M	1

The Additional Limiting Factor of 768 Kbps Broadband

- The calculation of the \$775 per household requirement does not take into account the locations that will be used to satisfy merger commitments.
- Utilizing 768 Kbps to define an area as unserved for CAF I significantly limits the number of eligible census blocks when coupled with the remaining screening criteria.
- Many customers in otherwise unserved areas outside of potential Phase II CAF areas could be upgraded from 768 kbps to 4 Mbps, but will be left behind instead.

Missouri Case Study – CAF I Eligibility



Unserved Housing Units @ 768 Kbps:

8,405 Housing Units
1,842 Sq. Miles

Unserved Housing Units @ 3Mbps:

26,426 Housing Units
3,786 Sq. Miles

Addressable housing units triple when the broadband speed criteria is increased from 768 Kbps to 3 Mbps